

REMARKS/ARGUMENTS

Claims 1-10 are pending.

Figs. 2b, 3b, 5a and b, and 6a and b were deemed to be prior art by the Examiner and thus, the Examiner wanted them designated by a legend such as -- prior art --. Applicant respectfully submits Figs. 2b and 3b do not show prior art, but instead illustrate two embodiments of the present invention. It is respectfully submitted that only Figs. 5a, b and 6a, b contain prior art. Accordingly, Applicants submit herewith new Figs. 5a, b and 6a, b with the addition of the legend -- prior art --.

Fig. 4 was objected to because it included no reference numerals. Accordingly, Applicants submit herewith a proposed amended Fig. 4 with the proposed changes indicated in red. Fig. 4 now includes reference numerals. It is respectfully submitted that no new matter has been added. Accordingly, it is respectfully requested the objections to the drawings be withdrawn.

The Examiner pointed out the preferred arrangement for the Specification. Additionally, the Examiner objected to the disclosure because the disclosure referred to claims in paragraph 1, line 2 and on page 3. Accordingly, Applicants will submit a Substitute Specification that adds headings in accordance with preferred U.S. Patent practice and corrects other minor errors discovered therein with a Supplemental Amendment. Additionally, the reference to the claims in the disclosure will be removed.

The claims have been amended to remove the reference numerals and to remove the phrase "characterized" in accordance with preferred U.S. Patent practice.

Claims 1-3, 5-7 and 10 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Okuda et al., U.S. Patent No. 4,380,934.

Claim 4 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Okuda et al.

Claims 8 and 9 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Okuda et al., in view of Leschek et al. (Re. 29,785).

These rejections are respectfully traversed and reconsideration is respectfully requested.

Amendment(s) to the Drawings:

The attached sheet of drawings includes changes to Figs. 4-8. These sheets, which includes Figs. 4-8 replaces the original sheets including Fig. 4-8.

Attachment: Replacement Sheet
Annotated Sheet Showing Changes

Okuda discloses a conduit 10 that has an inner layer of sound-absorbing material 12. As may be seen from the figures, there are two diametrically disposed holes in the conduit provided and in the absorbing material. An ultrasonic transmitter 18 is plug into the first hole and an ultrasonic receptor is plugged into the opposite hole. It is respectfully submitted that the Examiner is mistaken when he denotes that reference numeral 12 of Okuda is directed to a membrane. Reference numeral 12 denotes, in fact, an absorbing material that is pretty much the opposite of a membrane of a transducer.

In contrast thereto, with the present invention, and as clearly recited in claim 1, the wall of the pipeline is also part of the transducer. The membrane of the transducer is built with a small wall portion that is specially designed. On an outer side of that wall portion, the rest of the transducer parts are located. Thus, the membrane and a small part of the wall are one and the same piece, whereby the membrane building part of the wall is also in one piece with the wall and not an extra part. It is clear, based upon the above description of Okuda, that Okuda does not disclose a closed wall of the conduit wherein part of the wall is the membrane of the transducer.

Indeed, the difference between the present invention and Okuda becomes even clearer if one considers Fig. 2 of Okuda illustrating the ultrasonic receptor 22. The ultrasonic receptor 22 is enclosed in a housing 40 that is opened to the insider of the conduit. There is no membrane and the ultrasound is received directly by cone 36 that is connected to the ultrasonic vibrator 34. It is not a problem in the configuration of Okuda to have a hole in the wall, i.e., in the ultrasonic receptor, because that apparatus measures the buildup of vortices. Contrary to that principle, in a measurement and principle used by the present invention, the flow must be as laminar as possible. Any vortices will result in serious erroneous measurements.

Accordingly, it is respectfully submitted that Okuda et al. does not anticipate claim 1 and therefore, it is respectfully submitted that claim 1 is allowable.

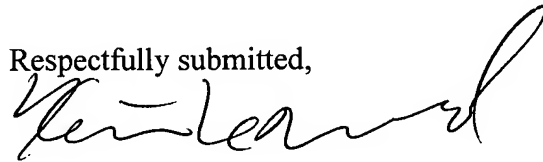
Claims 2-10 depend, either directly or indirectly, on claim 1 and therefore, they are allowable for at least the reasons claim 1 is allowable.

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 415-576-0200.

Respectfully submitted,



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Attachments
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